

**PUBLIC INFORMATION AND COMMUNICATION SERVICES  
(PICS)**

**NIH - TASK ORDER**

**RFTOP#176**

**TITLE: Usability Support to the NIA**

**PART I – REQUEST FOR TASK ORDER (TO) PROPOSALS**

**A. POINT OF CONTACT NAME:**

Molly Eng

Phone: 301-443-7810

Fax: 301-435-6101

**Proposal Address:**

6011 Executive Blvd., Rm. 529R  
Rockville, MD 20892-7663

**Billing Address:**

Accounts Payable, OFM, NIH  
Bldg. 31, Rm. B1B39  
Bethesda, MD 20892-2045

**B. PROPOSED PERIOD OF PERFORMANCE:** 220 days from task order award.

**C. PRICING METHOD:** T&M - Currently available funding for this project is limited to \$50,000. A firm that is able to complete this project for less than that amount is invited to propose a lower price for the successful execution of this task. If a firm determines that the budget amount is insufficient, they should advise how best to spend this amount and how much more is required to fully meet the objectives. Price will be a consideration in the determination of the firm that is selected for award.

**D. PROPOSAL INSTRUCTIONS:** Proposals should be brief and submitted by e-mail. Electronically attached samples/hotlinks are acceptable and encouraged. Please enter in the subject line the following text, "RFTOP#176 – Proposal from {insert your firm's name}." A signed task order form may be submitted electronically or will later be requested from the successful bidder.

**E. RESPONSE DUE DATE:** May 10, 2004 at 10:00 AM.

**F. TASK DESCRIPTION**

**Introduction**

**The contract will provide a three phase approach in evaluating the website that is based upon the following phases:**

### **Phase I: Expert Review and Best Practices Design Guidance on Basic Page Presentations**

**Contractor will review and provide comprehensive feedback on the initial page prototype based on:**

- A shared understanding of the goals and context of the NIA web site
- user-centered design best practices
- medical/health care information site industry standards
- unique understanding of the challenges facing Institute site developers
- derived from extensive experience evaluating and designing NIH sites

### **Phase II: Usability Testing of the Proposed User Interface Structure**

**Contractor will conduct 16 one-on-one interviews with representative end users over the course of two days to test the critical parameters of the site and to validate the recommendations from the perspective of the participants who represent end users of the NIA site.**

**This testing will evaluate:**

- self-evidence of resources and interactions
- naturalness of the navigational model
- understandability of language and labels for end users
  - Intramural Research <> Research conducted at NIA / Labs @ NIA
  - Extramural Research <> Research sponsored by NIA
- Appropriateness of planned content
- Impact and appropriateness of imagery used on NIA site

**This test will take place on the “under development” site. Conducting usability testing early in the design cycle allows for a validation of the basic task flows and also allows for additional exploration of the different user groups’ understanding and expectations for the site. Testing at this state ensures that the site is developed on a usable navigation/task flow foundation.**

**Contractor will provide a usability testing reports that will clearly list the expected results by benchmarking participants’ ability to complete critical and frequent tasks on the site.**

**Contractor will provide recommendations for improving the usability of the site where usability testing identifies gaps between the users’ conceptual model for the information and resource and the presentation model embedded in the site.**

**Contractor will provide recommendations through annotated screen callouts that provide details about:**

- The usability problem
- The underlying cognitive mismatch
- The recommended fix

**In addition, the usability testing data provides an objective baseline for on-going assessment of the site’s usability and progress. Finally, collecting objective usability testing results provides a data driven design environment. Task specific**

**data speaks directly to adjudicating design decisions that are mired in politics or emotion. Observing users provides data to identify and select the best design/graphic elements and task flow choices from the perspective of the individuals that count most - the end users.**

### **Phase III: Post Launch Validation/Testing**

**At an agreed upon point after the site launch, Contractor will conduct a second round of usability testing. Early usability testing provides a clear and solid evaluation of the foundation navigation and basic task flows for the site. Re-evaluating the 'live' site provides different data because at this later point the site typically has:**

- **More topics and more comprehensive information about each**
- **Additional functionality**

**Thus while early testing provides critical validation of the underlying information architecture (navigation structure/label/task flows), live site testing provides feedback about the site under the full weight of the planned resources and information and branding overlay. Findings of the 'live' site Validation/Testing provides additional data to refine and further improve NIA's site visitor experience. In addition, this session provides an opportunity to explore the appropriateness of the depth and breadth of the content presented on the site.**

# Technical Approach

Contractor will develop a technical approach to provide Usability Support for the development of the public site. Contractor will refine and adjust the specific goals and activities as needed based on discussions in the kickoff meeting and interactions throughout the project.

## **Phase 1: Expert Review and Best Practices Design Guidance on Basic Page Presentation**

Contractor will conduct an on-site kickoff meeting with relevant NIA staff and other core project team members to develop a clear and shared understanding of the overall project and project timeline.

Upon approval of the NIA Project Officer the Contractor will kick off Phase I of the Usability Support Project (Prototype Review) and collect critical data to drive Phase II (Usability Testing).

**During this meeting, Contractor will ask NIA to walk through and review the**

- **objectives for the site**
- **(Prioritized) Target users' group demographics**
- **the critical and frequent tasks/task flows for each user group**
- **the critical success factors for the project**
- **the project timeline.**

**In addition, NIA will walk through the proposed site design and design decisions in detail.**

**NIA and the Contractor will lead a discussion of any known technological issues that may limit the implementation of ideal user task flows. This information will feed into the expert review/feedback (e.g., knowing that the site is designed for older individuals puts different and specific pressures on elements of detailed design) and for the subsequent usability testing activities (provides input to participant selection and testing script development).**

**Contractor will ensure that all the appropriate data collected from the above session is provided to the Project Officer for review prior to proceeding to the next phase of activity. The contractor will review the proposed task flows and page designs.**

**Contractor will provide feedback on identifiable usability challenges in the proposed site. Contractor will also provide recommendations for enhanced designs to improve the presentation of the existing pages and to guide the design/implementation of additional pages. For example, a common problem for National Institutes of Health sites is creating pages with vocabulary and labels which are understandable to individuals not familiar with "NIH-speak" (e.g., intramural/extramural research). Based on experience evaluating and designing other NIH sites, Contractor will identify this potential problem and recommend a fix.**

**The recommended fixes will be tested and validated *in the context of users who specifically represent likely NIA visitors* in subsequent usability testing activities.**

Contractor will provide a status report of this activity to the Project Officer for review prior to progressing to the next phase of the testing. The NIA Project Officer will have no more than a **3 (three) day** turnaround on receipt of the review process due to stringent time factor associated to this project.

## **Phase II: Pre-Launch Usability Testing**

### **Step 1: Develop Moderators Guide**

The Contractor will proceed with phase II upon approval of the Project Officer, the phase will consist of the approved date of phase I and an initial review of the web site, Contractor will prepare a Moderator's Guide for the usability testing sessions. Contractor will create this script to objectively evaluate the effectiveness of task flows for anticipated critical and frequent tasks as well as to determine users' conceptual site-model development and the effectiveness of graphical and interactive elements of the site.

Generic examples of questions could include:

**High-level navigational pages** - users should be able to tell such things as:

- Where am I? What type of site (or sub-site, page) is this? (site identity)
- What can I do here? What do I expect? (chance to head off any misconceptions)
- Where do I start? (avoid giving too much on Home Page or other navigational pages)
- What are my options? (prelude to site or sub-site structure and navigation)
- Can I do anything right away? (controls on home page or other navigational pages)
- Who and where are "these people"? (credibility, logistics)

**Graphical treatment(s)** – will consider by asking questions to address:

- What's your first impression of the page? (e.g., authoritative but approachable? comprehensive but easy to navigate? cluttered or overly minimalist?)
- Do the graphics make sense? Do the graphics support the task goals?

**Specific task-related questions** - After establishing whether these basic requirements are met and approved by the Project Officer, the contractor will proceed with these questions derived from frequent/important activities on the site. Contractor will design these questions to evaluate issues such as:

- Are link names clear? Do they help users consider their options? Do they guide users to the correct alternative?
- Is the organization and grouping of elements on the home and secondary pages sensible (from the user's perspective) with respect to task flow for frequent or important tasks?
- Is information and/or control ordering based on criticality, frequency of use, and logical sequence?

### **Deliverable: Usability Testing Moderator's Guide**

The Project Officer will have 5 working days to review and either provide requested changes or approve the deliverable "Usability Testing Moderator's Guide". The contractor will proceed to the next step upon approval of the Project Officer.

### **Step 2: Coordinate Recruiting of Representative Users & Testing Facilities**

Contractor will work closely with both NIA personnel and / or NIA technical representatives to will establish the target recruiting goals during the kickoff meeting to ensure that important critical visitor populations are represented. Contractor will coordinate directly with a national recruiting firm to develop a screener to identify and recruit 16 representative users to participate in usability testing.

Contractor will adhere to all applicable regulations and / or policies as established by the Department of Health and Human Services (DHHS), National Institutes of Health (NIH), National Institute on Aging (NIA) Security Requirements as indicated in section Security Requirements within this Statement of Work.

**Deliverable: Telephone Screener**

### **Step 3: Coordinate Usability Testing Facilities**

Contractor will work to support NIA in the coordination of the testing facility. If Possible the Contractor will attempt to secure either the Bureau of Labor Statistics usability lab or the National Cancer Institute Usability Lab. Both of these labs are provided free of charge to government agencies focused on improving the citizen centric presentation of their web sites. Critically, both sites are conveniently located (the BLS lab is located steps off the red line) and also provides comfortable facilities for observers to come and view usability testing in progress.

### **Step 4: Conduct Usability Testing**

Contractor will (over two consecutive days) conduct 16 one-on-one usability testing interviews lasting approximately one hour each at a usability testing facility in the Washington, DC area. Contractor will deliver complete usability testing video tapes (16 hrs. of VHS tape) directly to the NIA Project Officer.

### **Step 5: Synthesis of Quantitative and Qualitative Findings**

Contractor will review feedback gathered during the testing based on the metrics defined in the kickoff meeting. Based on the collected data, Contractor provides two types of feedback for usability testing projects:

**Quick Wins Document** – On the day following the testing, Contractor will present a brief, bulleted word document summarizing the high impact findings of the usability testing. This document, which will be reviewed via conference call with the core Web Team on the afternoon following the testing, will provide rapid, prioritized action oriented feedback and recommendations to immediately leverage the testing investment.

Challenges, Opportunities and Recommendations Report – **Approximately one week following testing, Contractor will submit a formal usability testing report that will:**

- 1) Document (in greater detail) the usability successes and challenges observed during the testing.**
- 2) Indicate the usability impact/priority of making the recommended changes.**
- 3) Provide recommendation that can be implemented in an effort of improvement to the NIA Web site.**

**While the content of the full report includes the findings of the QuickWins Report, it also comprehensively documents and extends the project description to include less mission critical findings.**

Contractor will aggregate and analyze the usability testing findings to create both objective and subjective results for the usability testing sessions. Contractor will synthesize the findings of the Usability Testing and develop an annotated PowerPoint overview of the methodologies, the findings and the recommendations. This will include prioritized, concrete suggestions conveyed via annotated screenshots.

### **Step 7: Presentation of Findings and Recommendations**

Contractor in coordination with the Project Officer will present the findings to NIA either in person or via a teleconference (whichever is preferred by NIA). The presentation will review usability testing methods, findings and concrete recommendations for improvement of the site.

This meeting typically lasts about 2.5 hours, with 1 hour reserved for formal presentation of findings. The balance of the time is reserved for questions, usability strategy development and discussion of the findings, including issues surrounding implementation and directions for further improvement.

### **Deliverables:**

- 1. Annotated PowerPoint Presentation outlining synthesized Quantitative and Qualitative findings and providing concrete recommendations for improvement**
- 2. 16 VHS Videos of the usability testing sessions**

### **Phase III: Live Site Testing**

Prior to initiating this activity, Contractor will conduct a review meeting to identify and understand any concerns or changes to the previous protocol, recruiting or testing information.

With the exception of additional testing goals included on the expansion of the site resources and tools, the steps in the second round of usability testing are identical to those in the first round.

## **Security Requirements**

These positions within this statement of work have been classified as being Level 1C in nature since the contractor will not have access to internal resources. Should the contractor require access to the NIA Automated Information Systems, the contractor will be required to successfully meet and adhere to all NIH/NIA Security Policies and Procedures that govern the utilization of NIH/NIA AIS resources.

Specifics associated to the position are identified below with identified requirements necessary to execute the duties of this position:

- **Statement of Security Level Designation**

Depending on the required access will determine the level of classification required; presently the level 1C has been identified for this work request.

- **Minimum Security and Safeguard Requirements**
  - a. Applicants assigned to a Level 1C position (Low Risk or Non-sensitive) must be subject to a National Agency Check and Inquiry Investigation (NACI) at the discretion of the government, should the need arise.
- **Special Provisions to address contractor employees associated with the project:**
  - a. Persons without required background investigations cannot perform any critical/sensitive contract work until their investigations are completed or initiated.
  - b. Persons without necessary background investigations will not have access to sensitive project data.
  - c. Persons without necessary security clearances will not have access to classified national security information.
  - d. All contractor personnel designated as Levels 5C and 6C, or others as deemed necessary, who are directly performing the work of the contract, particularly those who work in DHHS facilities or who have access to DHHS equipment or sensitive data, must be named in the contract and must be subject to a key personnel clause.
  - e. Violation of any of these conditions may lead to termination of the contract.
- **Rules of Behavior & Remote Access**
  - Applicant assigned to this agreement must review, sign and submit to the NIA ISSO the attached Rules of Behavior for accessing NIA Resources. If the applicant does not require access to NIA Resources, they are not required to complete this document.
  - Applicant that is identified as requiring remote access to NIA resources will be required to review, sign and submit to the NIA ISSO a remote access certification agreement. The NIA ISSO and / or Project Officer will promptly identify those individuals as the need arises and those individuals will be classified as Key Personnel of this agreement.
- **Non Disclosure Agreement**
  - Applicant assigned to this agreement must review, sign and submit to the NIA ISSO and / or Project Officer a non-disclosure agreement.

By accepting this contract, the contractor providing application systems or Federal Information Processing resources to any component of the Department of Health and Human Services (DHHS) agrees to comply with the applicable Automated Information Systems (AIS) security policy as outlined in the Statement of Work.

The contractor shall include this requirement in any subcontract awarded under the prime contract. Failure to comply with said requirements shall constitute cause for termination.

## Project Timeline

May 11<sup>th</sup>-14<sup>th</sup>

**Phase I:** Expert Review and Best Practices Design Guidance on Basic Page Presentations

May 20<sup>th</sup> – May 27

**Phase II:** Usability Testing of the Proposed User Interface Structure



6-9 months from Web site launch

**Phase III:** Post Launch Validation/Testing

## **G. EVALUATION FACTORS**

### **1. Prior corporate experience**

Contractors are to provide a one third page description of no more than four projects demonstrating the contractor's experience with usability testing and their ability to execute the proposed technical requirement.

### **2. Technical approach**

Contractors are to provide a written proposal demonstrating an understanding of the task order requirements through a comprehensive description of the proposed approach and the scheduling and assignment of tasks to experienced personnel. The technical requirements will be evaluated according to soundness, practicality, and feasibility of the written description and the extent to which the technical approach will produce objective and meaningful feedback.

### **3. Price**

While price is not the only evaluation factor, proposed prices will be considered in determining the firm that represents the best value to the government given the budget for this project.

Task Order# NICS-176

TITLE: **Usability Support to the NIA**

**PART II - CONTRACTOR'S REPLY: CONTRACT 263-01-D-\_\_\_\_\_**

Contractor:

Points of Contact:

Phone-

Fax-

Address:

TOTAL ESTIMATED COST:

Pricing Method: T&M

TOTAL ESTIMATED NUMBER OF HOURS:

PROPOSED COMPLETION DATE:

FOR THE

CONTRACTOR: \_\_\_\_\_  
Signature Date

**SOURCE SELECTION:**

WE HAVE REVIEWED ALL SUBMITTED PROPOSALS HAVE DETERMINED THIS FIRM  
SUBMITTED THE BEST OVERALL PROPOSAL AND THE PRICE/COST IS REASONABLE.

Billing Reference # \_\_\_\_\_

Appropriations Data: \_\_\_\_\_

RECOMMENDED:

\_\_\_\_\_  
FAX # Signature - Project Officer Date

APPROVED: \_\_\_\_\_  
FAX # Signature - Contracting Officer Date

**NIH APPROVAL -**

CONTRACTOR SHALL NOT EXCEED THE ESTIMATED LABOR HOURS OR ESTIMATED TASK ORDER AMOUNT  
WITHOUT THE WRITTEN APPROVAL OF THE CONTRACTING OFFICER & PICS COORDINATOR

APPROVED: \_\_\_\_\_  
Fax# 301-435-6101 Signature -Anthony M. Revenis, J.D., NIH-PICS Coordinator  
Date